Ministry of
Natural
Resources

Ontario

May, 1985

REGIONAL DIRECTOR'S APPROVAL STATEMENT

This Interim Management Statement will provide interim direction for the management of the Lake of the Woods Provincial Park Adcition until a comprehensive Park Management Plan is prepared.

This statement will provide the basis for the subsequent preparation of the Park Management Plan.

I am pleased to approve this Interim Management Statement for the Lake of the Woods Provincial Park Addition.

D. R. Johnston
Regional Director
Northwestern Region

INTRODUCTION

The addition of the Lake of the Woods Provincial Park includes Bigsby, Dawson, Painted Rock and Splitrock Islands and The Three Sisters Islands. These islands are included as a nature reserve zone to the existing provincial park.

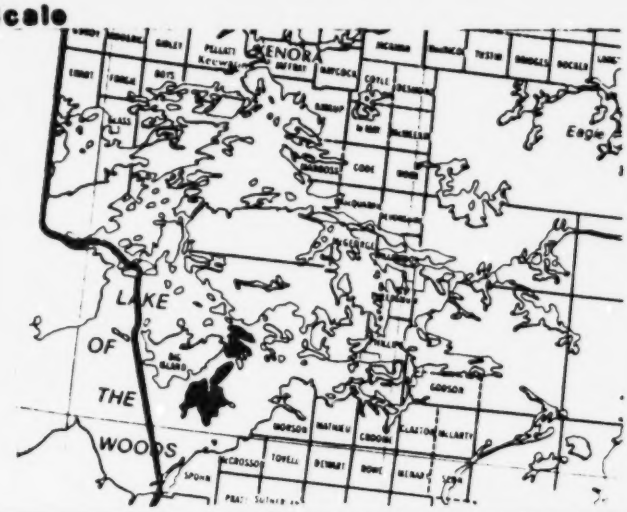
Generally, traditional local uses of these islands (with the exception of timber harvesting) will be permitted to continue provided they do not jeopardize long-term park objectives or adversely impact known park values. The park management plan will further address the specific management of these islands.

BACKGROUND INFORMATION

NAME:	Lake of the Woods Provincial Park Addition
PROPOSED CLASS:	Nature Reserve Zone
M.N.R. DISTRICT:	Kenora
M.N.R. REGION:	Northwestern
TOTAL AREA(ha):	11,800
LAND:	
WATER:	
SITE REGION:	5S
SITE DISTRICT:	1 and 2
DATE In REGULATION:	85.01.24

REGIONAL SETTING MAP

Scale



TARGETS

1 LIFE SCIENCE REPRESENTATION

site type/landscape unit	species/communities
Landscape Unit 28-Manitou-Kenora Drift Complex Landscape Unit 31-Rainy River Clay Plain	White Pelican nesting site. Black Cormorant nesting site. Two biophysiographic units.

2 EARTH SCIENCE REPRESENTATION

geological theme	feature
Lake Archean Tectonic	Acid instrusions, Aulneau batholith
North Bay Interstadial	Clay, littoral sand features

3 CULTURAL RESOURCE REPRESENTATION

theme	theme segment
Unknown	Unknown

4 RECREATION OPPORTUNITIES

day use	car camping	wilderness/back country
unstructured	n/a	n/a

INVENTORIES

level / type	earth science	life science	cultural	recreational	other
reconnaissance completion date	1979, 1980	1978, 1980	1982	1982	
detailed completion date	not completed	not completed	not completed	not completed	
required?	yes	yes	yes	yes	

DATE 1985 05 24

MANAGEMENT GUIDELINES

1) LAND TENURE

3 Land use permits issued for commercial fish camps
1 Land use permit issued for sawmill site
1 Land use permit issued for garbage disposal site

Guideline

Existing land tenure will be permitted to continue and will be addressed during the preparation of the park management plan.

2) LAND ACQUISITION/DISPOSITION

5 patented locations - GW-4, 1.17 acres; EB-796, 4.83 acres; EB-1610, 1.0 acre; EB-1700, 2.84 acres; EB-1738, 0.73 acres

Guideline

Existing patented properties will remain. Future status will be addressed during the preparation of the park management plan.

The further disposition of Crown-owned lands will not be considered.

3) EXISTING PARK DEVELOPMENT

No existing park development

Guideline

The islands are included as a nature reserve zone to the existing park and as such, future development will be limited to trails, and minimal interpretive facilities for research and educational purposes. Park development will only occur under the guidance of an approved park management plan.

4) RECREATIONAL ACTIVITIES

The islands presently experience low intensity, dispersed recreational activity including day-use recreation (swimming/picnicking, shore lunches, etc.) camping, and waterfowl hunting. While there are no sport fishery waters located on the islands, the waters surrounding the islands are angled by local residents and guests of tourist operators.

Guideline

Existing recreational activities will be permitted to continue and will be further addressed during the preparation of the park management plan.

5) COMMERCIAL ACTIVITIES

Traplines in the park area:

a) KE 142 - part Splitrock Island and part Painted Rock Island
b) KE 143 - part Splitrock Island
c) KE 150 - Dawson Island
d) KE 151 - Part of Painted Rock Island
e) KE 152 - Part of Painted Rock Island
f) KE 159 - Part of Bigsby Island
g) KE 160 - Part of Bigsby Island

Mineral exploration/extraction has been recommended to continue as a permitted use.

The local commercial tourism industry utilizes the islands for sport fishing in adjacent waters and waterfowl hunting from the shoreline.

Guideline

Trapping will be permitted to continue and will be further addressed during the preparation of the park management plan.

No other new commercial activities will be allowed.

Mineral exploration may be permitted through the Exploratory Licence of Occupation procedure, under Section 190, R.S.O. of the Mining Act.

Mineral exploration may be permitted in such a way that it does not conflict with the future management options of the provincial park or protection of identified park values.

Guideline - (conti'd.)

Aggregate extraction will not be permitted within the park.

The present level of commercial tourism activity will be permitted to continue.

6) NATIVE INTERESTS

3 licenced Native trappers

Guideline

Trapping will be permitted to continue and will be further addressed during the preparation of the park management plan.

7) NATURAL RESOURCES

Some natural resource values have been identified to date (earth and life science, cultural, etc.) in preliminary inventories.

One natural resource management concern regarding personal use fuelwood cutting has been identified.

Guideline

Personal use fuelwood cutting on the islands will be permitted to continue for those individuals with land tenure (ie. LUP, lease, patented property). A district fuelwood permit is required. This activity will be further addressed during the preparation of the park management plan.

8) CULTURAL RESOURCES

2 pictograph sites
1 graveyard site

Guideline

Known cultural/historical resources will continue to be managed and protected through the co-operation of the Ministry of Citizenship and Culture.

9) CLIENT SERVICES

Information on the earth and life science features of the islands should be made available to the public in order to gain an appreciation of their biological and geological significance.

10) RESEARCH

Earth and Life Sciences reconnaissance inventories have been completed.

Detailed inventories are required for earth and life sciences, as well as cultural and recreational resources.

Guideline

Research will be encouraged to further document park values by the Ministry of Natural Resources and other outside interests.

11) MARKETING

Not applicable

List of Sources and References

Kor, P. Earth Science Inventory Checklist - Bigsby, Dawson, Painted Rock and Splitrock Islands. Ontario Ministry of Natural Resources, 1979, 1980.

Noble, T. Life Science Inventory Check-Sheet - The Three Sisters, Bigsby, Dawson, Painted Rock and Splitrock Islands. Ontario Ministry of Natural Resources; 1978, 1980.

Ontario Ministry of Natural Resources, Kenora District Land Use Guidelines , 1983

Ontario Ministry of Natural Resources, White Pelican Position Paper, April 1977.

Ranford, Barry, "Ontario's Pelican Islands" Ontario Naturalist , June, 1971

22. BIGSBY ISLAND

a. Area Description

This area is made up of four large islands in south Lake of the Woods. These islands include Painted Rock, Splitrock, Dawson and Bigsby as well as the smaller Three Sisters Islands. The islands are relatively undisturbed and provide good examples of local vegetative communities and are also representative of Landscape Unit 28; the Manitou-Kenora Drift Complex, characterized by large, relatively homogeneous terrain of rolling, bedrock-controlled uplands interspersed with numerous lakes and wetlands. It should be noted, however, that Bigsby Island itself represents Landscape 31, The Rainy River Clay Plain.

b. Land Use Intent

The islands are recommended for park status as a nature reserve zone to form an addition to the existing Lake of the Woods Provincial Park. An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section, however, it must be realized that in some instances further refinement may be required.

c. Land Use Activity For Area No. 22—BIGSBY ISLAND

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that waterfowl hunting from shorelines be permitted to continue.
Mining	x		It is recommended that mineral exploration/ extraction be permitted to continue.
Provincial Parks	x		The area is recommended for park status as an addition to Lake of the Woods Natural Environment Park.
Roads		x	
Rural Residential		x	
Sports Fishing		x	
Tourism		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Wildlife Viewing	x		

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Wild Rice Harvesting		x	
Urban Development		x	

Poplar I
Firebag I
Rough I
Fish I
Skiff I
North Island
Dog I
NAONGASHING IND RES 31A & 35A
Naongashing
Rubber I
Stairway Pt
Miles Island
Alexander Island
Splitrock Island
Painted Rock Island
BIG ISLAND IND RES 31F
BIG ISLAND
LAKE OF THE WOODS IND RES 31H
BIG ISLAND IND RES 31D
BIG ISLAND IND RES 31E
Dawson Island
BIGSBY ISLAND
Gooseneck I
Ferris I
Hooper Pt
The Three Sisters
Village Island
Mineral I
Bigsby Pt
Tomahawk I
Nestor I
Black Pt
LAKE OF THE WOODS PROVINCIAL PARK
DISTRICT OF KENORA

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
The Three Sisters - White Pelicans	Big Island	52E/2E	770330

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: District of Kenora

LOCALITY: Lake of the Woods

LAT.	LONG.	ALT. MIN.	ALT. MAX.
49° 02'N	94 ° 41'W	± 1060	± 1070

TOWNSHIP / LOTS / CONCESSIONS:

AREA: about 10 acres about 4 ha

OWNERSHIP: Crown

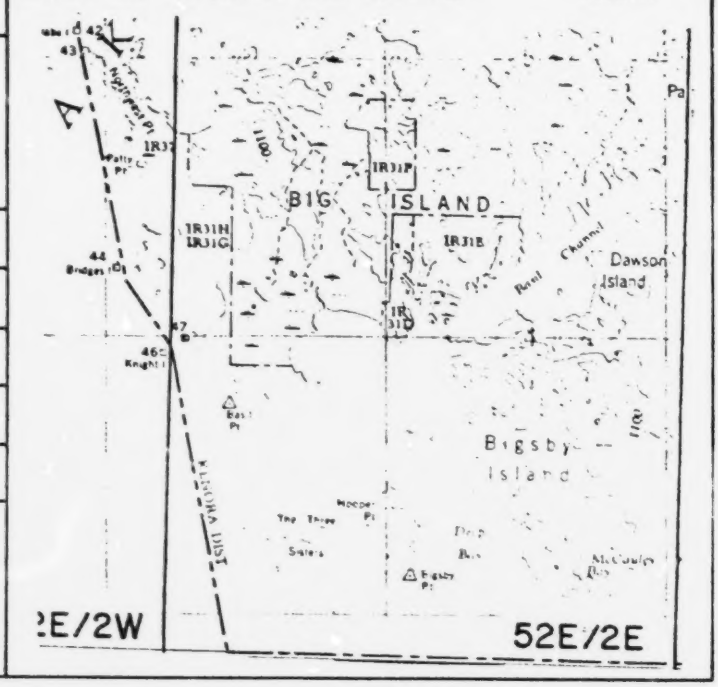
ADMINISTRATION: Ministry of Natural Resources

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
L.11-Rainy River	5S-2
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
NWR-Kenora	

AERIAL PHOTOGRAPHS — BASE MAP:

YEAR ____ ROLL ____ FLIGHT LINE ____ NUMBERS ____

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

The Three Sisters consist of a few small rock islands off the much larger Bigsby and Big Islands in Lake of the Woods. These small islands support Ontario's only colony of white pelicans (Pelicanus erythrorhynchos) who share their domain with double-crested cormorants (Phalacrocorax auritus). There is very little vegetation remaining on these islands as much of it has been killed off through defecation by the colony. When the island has been completely denuded the pelicans will move on to a new nesting location (Ranford, 1971). The waters of these and adjacent islands are used as feeding areas.

These islands should receive some form of protection. As the pelicans could move on to a new area in a few years, the area designated for protection should incorporate their normal feeding grounds such as the shorelines of Big & Bigsby Islands. If they do leave, the protection of their habitat would allow for its natural rehabilitation and their possible return.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Ranford, B., 1971. Ontario's Pelican Islands Ontario Naturalist, June, p.4-9.

EVALUATION AND PRIORITIES

This area has potential as a candidate Nature Reserve (see above).

DATE COMPILED	COMPILER
December 7, 1978	T. Noble

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Bigsby Island	Big Island	52E/2E	850360

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: District of Kenora

LOCALITY: Lake of the Woods

TOWNSHIP / LOTS / CONCESSIONS:

AREA: 15,600 acres 6226 ha

OWNERSHIP: Crown

ADMINISTRATION: Ministry of Natural Resources

FOREST REGION AND DISTRICT: L.11-Quetico; L.12-Rainy River

SITE REGION AND DISTRICT: 5S - 1 & 2

MNR REGION AND DISTRICT: NWR-Kenora

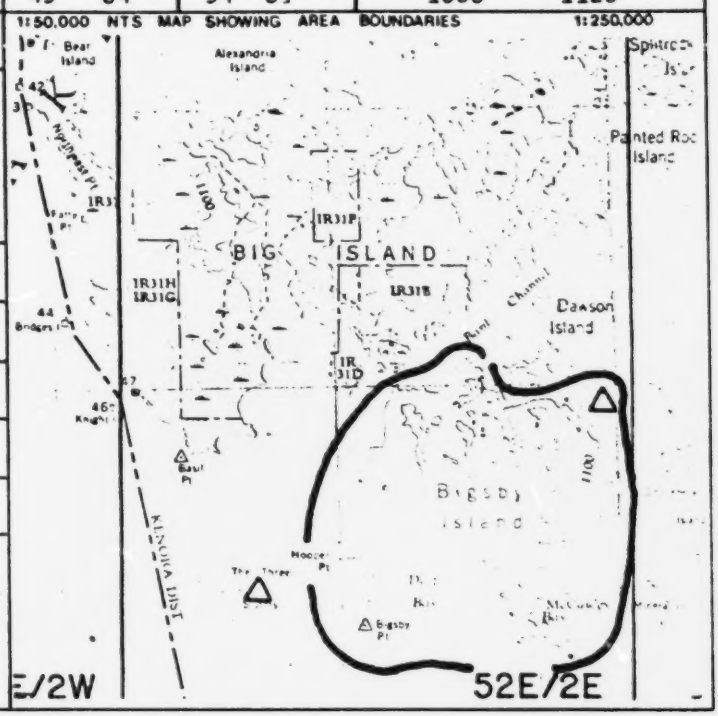
CONSERVATION AUTHORITY:

AERIAL PHOTOGRAPHS — BASE MAP:

YEAR / ROLL / FLIGHT LINE / NUMBERS

LAT.	LONG.	ALT. MIN.	ALT. MAX.
49° 04'N	94° 34'W	± 1060	1125

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Bigsby Island, located in Lake of the Woods immediately south of Big Island, is similar to its neighbour in that they both have value for representing the same two biophysiographic units, namely:

(i) very weakly broken lacustrine clay plain with clay till and peatlands being a significant part of this landscape - closed deciduous forest is prevalent on the mineral soil sites while black spruce dominated swamp and bog vegetation types are wide spread on organic soils. Two excellent marshes are found in Dawson & McCauley Bays. Littoral features include extensive sand beaches with occasional sand beaches and shoreline marshes. Some aeolian sands were noted blowing off some of these sand beaches into lagoons & swamps;

(ii) weakly broken wave-washed bedrock plain with pockets of lacustrine clay. The low bedrock knolls support relatively open coniferous forest with closed deciduous forest on the clay sites. It does not appear that this bedrock area was burnt at the same time as the fire on Big Island as the forest here is more mature and not as open. This bedrock unit is quite small compared to that on Big Island.

This island has excellent representational value to the Nature Reserve system as its two major biophysiographic units are representative of the site region. The line dividing the site region into two site districts conceivably passes between these two

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

EVALUATION AND PRIORITIES

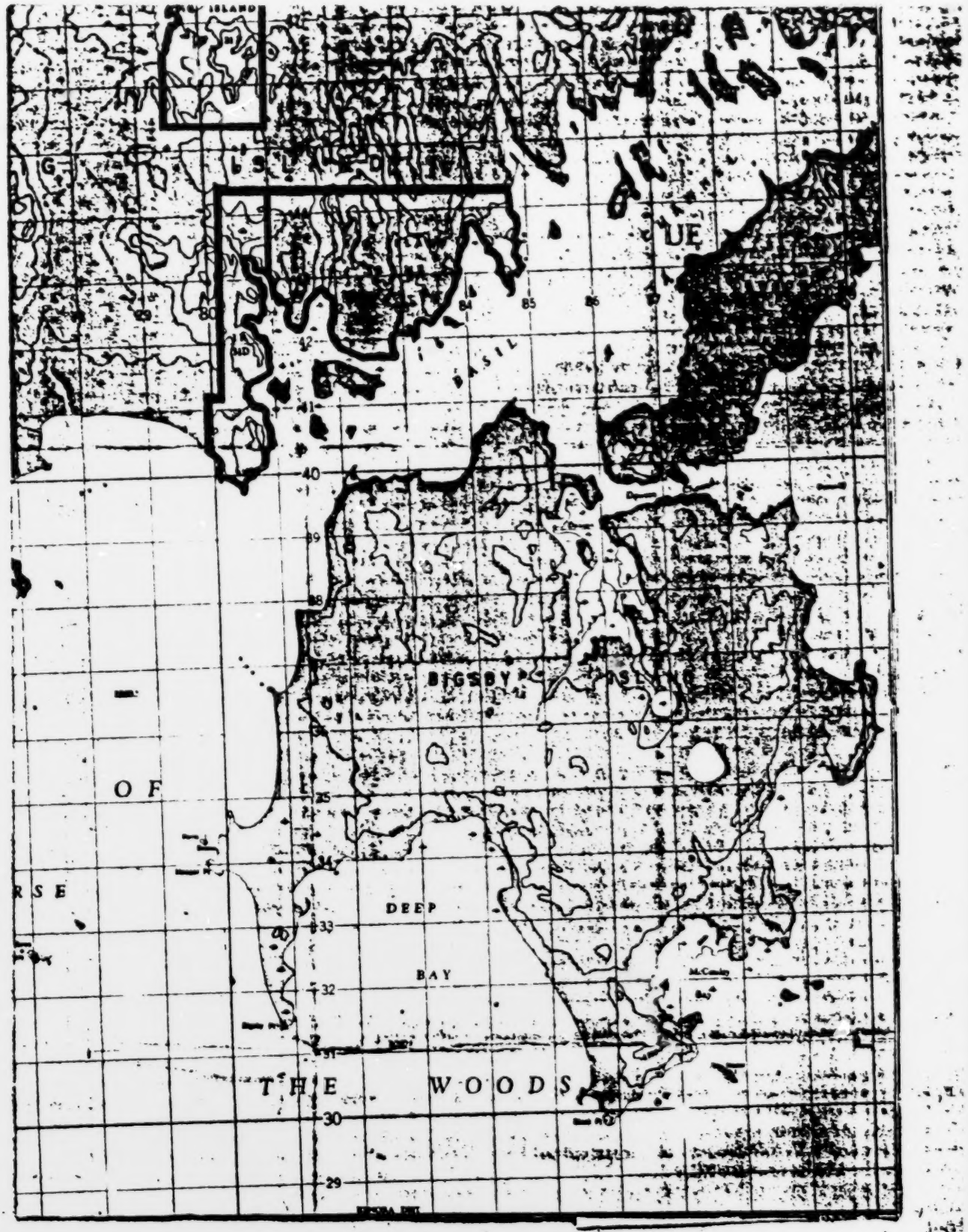
Bigsby Island is relatively undisturbed and consequently has excellent potential as a candidate Nature Reserve for the representation of terrain is characteristic of the Site Region.

DATE COMPILED	COMPILER
December 6, 1978	T. Noble

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

units. According to the OLI maps, clay, rock, peat and sand (silty) substrates are found here.

The waters off this island are used as feeding areas by white pelicans and double-breasted cormorants from the nearby Three Sisters islands (52E/2E U.T.M.770327).


BIGSBY
DEEP
BAY
THE WOODS

FIELD NOTES

FIELD NO.: 9-6 NWR DATE: 1980.09.11

AREA NAME: BIGSBY ISLAND

LOCATION: 52E/2 (Big Island) 797341

FEATURE: Mature Deciduous Forest

ABIOTIC COMPONENTS - MICROCLIMATE - Normal to Warmer than Normal

SLOPE - Level

DRAINAGE - Good, Internal

SUBSTRATE - Stony Sand

ASPECT -

BIOTIC COMPONENTS - VEGETATION COMPOSITION BY STRATUM:

A) TREE - Mature Forest - White Elm, Black Ash, Bur Oak

B) SHRUB - Black Ash, Rubus idaeaus

C) HERB - Polygonum spp., Parthenocissus vitacea, *Caulophyllum thalictroides, Aralia nudicaulis, Smilacina racemosa, Graminae

D) BRYOID -

- FAUNAL NOTES - Red Squirrel, Blue Jay, Black Bear, Yellow-shafted Flicker

INCIDENTAL NOTES: Ground flora somewhat sparse.

NOTE: Change on Painted Rock Island to (white) spruce on rock.

-fish camp on NW shore, Bigsby Is.

- small cut on extreme N. of Painted Rock Is.

FIELD NOTES

FIELD NO.: 9-7 NWR DATE: 1980.09.11

AREA NAME: BIGSBY ISLAND

LOCATION: 52E/2 (Big Island) 797341

FEATURE: Bedrock Outcrop

ABIOTIC COMPONENTS - MICROCLIMATE - Warmer than Normal

SLOPE - Level

DRAINAGE - Severe, External Except for Pockets

SUBSTRATE - Granitic Bedrock

ASPECT -

BIOTIC COMPONENTS - VEGETATION COMPOSITION BY STRATUM:

A) TREE - Bur oak - Scrub

B) SHRUB - Juniperus communis, Ribes triste, Amelanchier sp.

C) HERB - Convolvulus sp., Corydalis sempervirens, Rubus idaeaus, Spirea alba, Athyrium filix-femina, Vaccinium myrtiloides

D) BRYOID - Polytrichum cushions, fruticose lichens

- FAUNAL NOTES -

INCIDENTAL NOTES:

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Splitrock Is., Dawson Is., Printed Rock Is.	Big Island, Morson	52E/2,52E/1	

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: District of Kenora

LAT.: 49° 11'N | LONG.: 94° 30'W | ALT. MIN.: 340m(1060') | MAX.: 390m (1200')

LOCALITY: Lake of the Woods

TOWNSHIP / LOTS / CONCESSIONS:

AREA: acres / ha

OWNERSHIP: Crown, 3 small private parcels

ADMINISTRATION: Ministry of Natural Resources

FOREST REGION AND DISTRICT: Great Lakes - St. Lawrence Quetico

SITE REGION AND DISTRICT: 5S-1

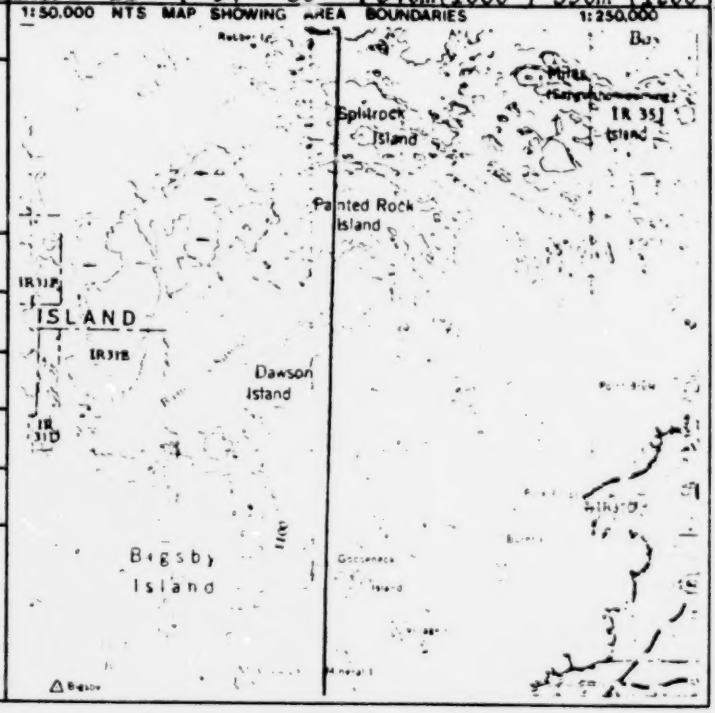
MNR REGION AND DISTRICT: NWR - Kenora

CONSERVATION AUTHORITY:

AERIAL PHOTOGRAPHS — BASE MAP:

YEAR	ROLL	FLIGHT LINE	NUMBERS
Federal Series		A13559	64-66

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Within the N-S extent of these islands occurs a widely recognized dividing line between site districts (Site Region 5S, Hills, 1959), Forest Districts (Great Lakes - St. Lawrence, Rowe, 1972) and Biophysiographic Units (Noble, 1979). While the islands give a limited sample area they provide an opportunity to study the changes associated with these divisions and give representation to the two lanscape units (Manitou Kenora Drift Complex and Rainy River Clay Plain) that have their boundary here.

The potential variety provided by this boundary area is greater than that of the Aulneau Peninsula. There has been some disturbance on Dawson Island (limited cutting) but islands provide ideal situations for maintenance of ecosystem integrity.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Hills, G.A. 1959. A Ready Reference to the Description of the Land of Ontario...Rowe, J.S. 1972. Forest Regions of Canada...Noble, T.W. 1979. Life Science Rep't., Site Region 5S.

EVALUATION AND PRIORITIES

Recommended for Nature Reserve status in lieu of Aulneau Peninsula

DATE COMPILED	COMPILER
80.12.08	

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

NAME	MAP NAME	MAP NUMBER	UTM REFERENCE
Bigsby Island	Big Island	52E/2	850360

COUNTY	LAT.	LONG.	ALT. MIN.	ALT. MAX.
	49° 04'	94° 35'	340 m (1060')	365 m (1130')

TOWNSHIP

LOT CONCESSION
Directly S. of Big Island, 75 km S. of Kenora, 45 km W. of Nestor Falls, in Lake of the Woods.

AREA approx.
14630 acres 5920 ha.

OWNERSHIP
Crown

ADMINISTRATION

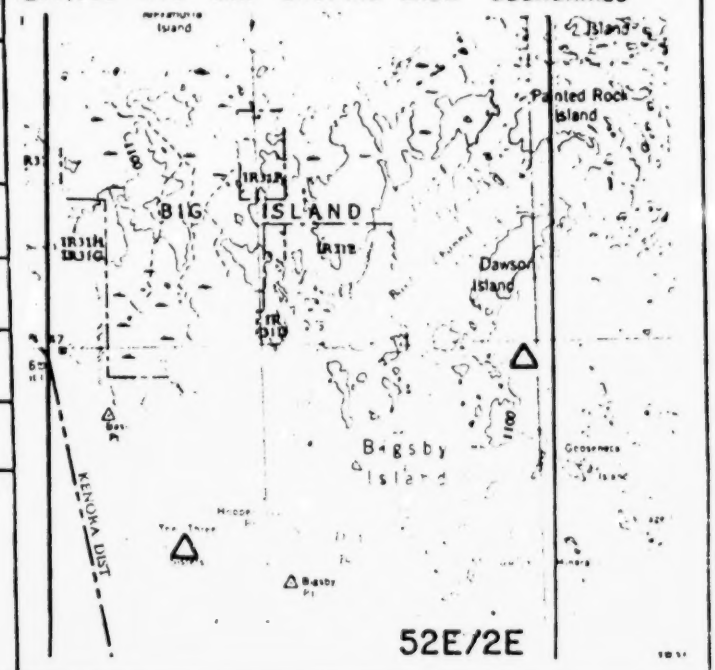
MNR REGION & DISTRICT
NWR - Fort Frances

CONSERVATION AUTH.

AERIAL PHOTOGRAPHS – BASEMAPS

YEAR ROLL FLIGHT LINE NUMBERS
Federal series A 13559, 30-32.

1:250,000 NTS MAP SHOWING AREA BOUNDARIES



EARTH SCIENCE FEATURES
- wave-washed granitic bedrock, Wabigoon Subprovince, with pockets of lacustrine clays and stony sand till
- weakly broken lacustrine clay plain with major peatlands
- west shore has extensive littoral features of sand (beaches, spits, tombolo, backshore marshes)

SENSITIVITY
- bedrock areas have low sensitivity; sand and marsh areas have high sensitivity

SIGNIFICANCE
- good representation of wave-washed bedrock terrain
- lacustrine deposits of glacial Lake Agassiz well-represented
- excellent littoral features, present-day processes

MAJOR REFERENCES

DATE COMPILED	COMPILER
13 February 1979	P. Kor

Ontario Ministry of Natural Resources, Division of Parks, Parks Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

Physical Features: brief field visitation 11 Sept.1980.

Bigsby Island lies within a granitic terrain of the Wabigoon Subprovince, Superior Structural Province, Canadian Precambrian Shield. The eastern portion of the island is characterized by wave-washed bedrock knolls with wetland pockets of lacustrine clay, silt and probably some sand. The bedrock consists of undifferentiated granitic intrusive rocks believed to be part of a large intrusive event associated with the emplacement of the Aulneau Batholith to the north (Ziehlke, 1974). Age of the bedrock is probably in the range of 2500 m.y., the date of the culmination of the Kenoran Orogeny which closed the Archean System. Large inclusions of mafic host rock were observed in the field, and the granitic bedrock proved to be somewhat foliated.

The greater portion of the island consists of a very weakly broken lacustrine clay plain with major peatlands and probably minor clay till. The west shore of Bigsby Island is dominated by extensive littoral features of sand, predominantly sand beaches, backshore marshes and sand spit development. Notable features include: 1) sand spit on the west side of Deep Bay (UTM 812332); 2) double sand spit complex which culminates in Bigsby Point (UTM 807330); 3) sand spit development in the NE portion of Deep Bay (UTM 842333 and 830341); 4) tombolo bar at Black Point (UTM 854302); 5) double spit/lagoon development on the NW shore of the island (UTM 821400). Though these littoral features are probably of recent origin, the sand deposits originated in the shallow waters of glacial Lake Agassiz, possibly as littoral or near-shore features. This lake is also responsible for the wave-washing of the higher bedrock knolls which occur on the island.

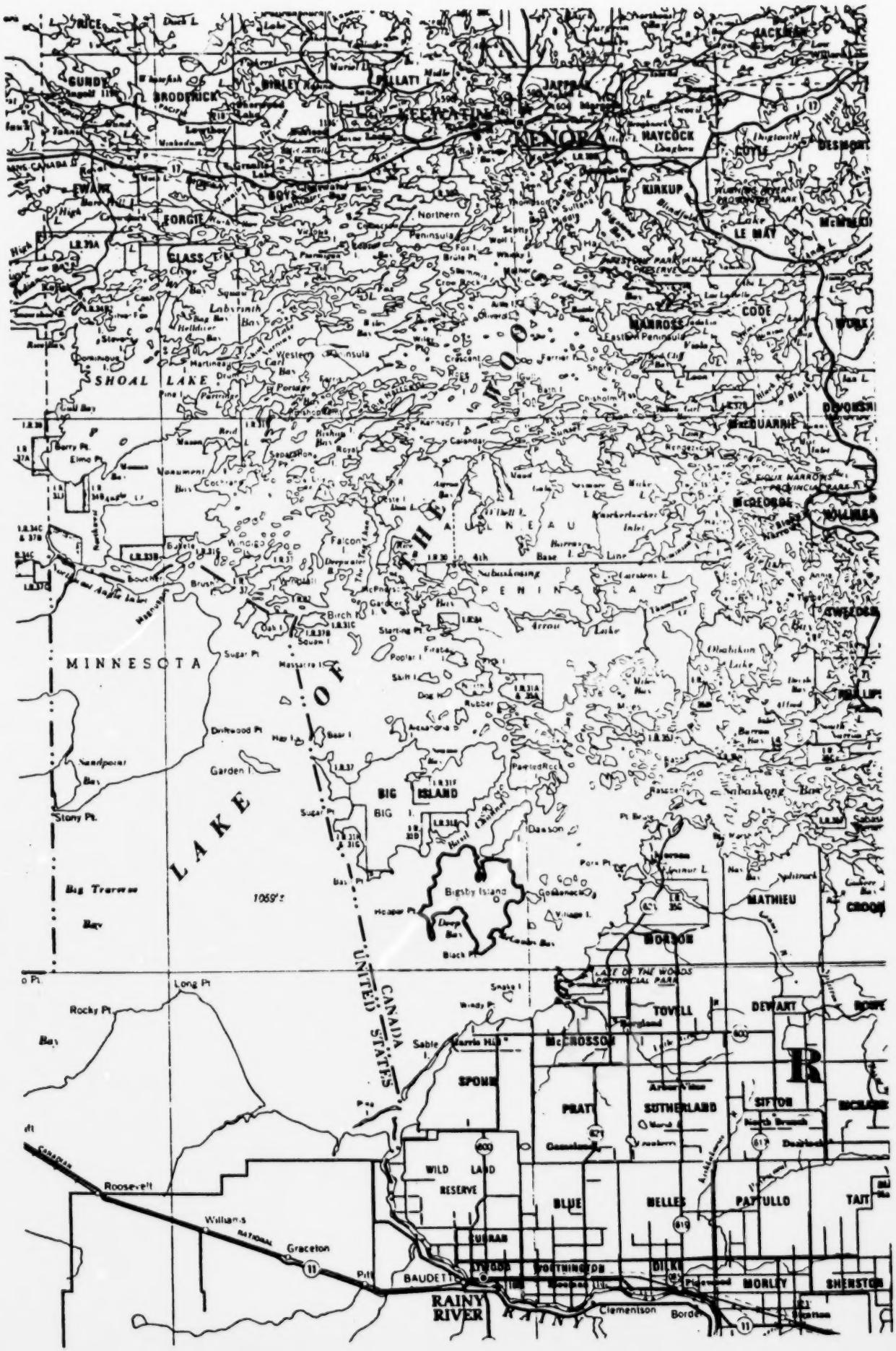
A small sand beach on the west side of the island (52E/2, UTM 800345) consists of fine-medium grained immature yellow sand with some coarser material. Boulders and cobbles occur near the bedrock exposures. The dry beach is relatively wide (7-10 m) and is backed by a 0.6-1.0 m high storm berm and a wetland backshore. Freshwater shells are a common component of the beach material, as well as Paleozoic carbonate rock fragments, probably introduced by the Keewatin glaciers from Manitoba. Clay probably underlies much of the islands' wetland areas, though this could not be substantiated by field observations. Glacial striae and an excellent set of chattermarks (noted at UTM 800345) indicate a north to south ice movement.

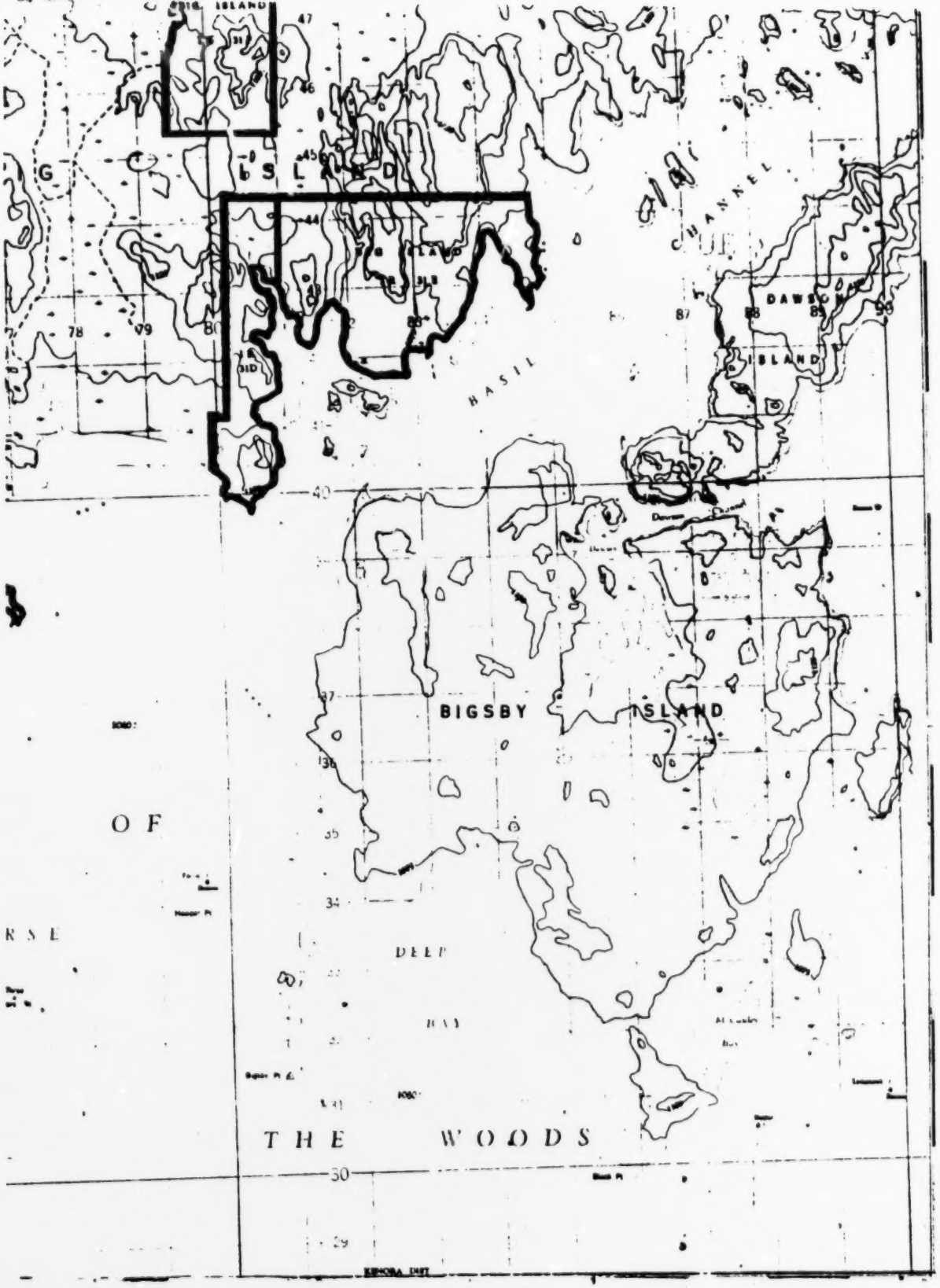
Significance:

Bigsby Island represents the following earth science features: wave-washed bedrock; granitic terrain of the Wabigoon belt, Superior Structural Province; glacial Lake Agassiz lacustrine deposits; littoral features of sand. Representation of these elements is probably better achieved on Big Island but the features on Bigsby Island are nonetheless of educational and scientific significance. Generally, the boundary between the Manitou-Kenora Drift Complex and the Rainy River Clay Plain crosses through the island; the former is represented by the high eastern wave-washed bedrock knolls, the latter by the remainder of the island - low, wet and clay dominated.

Recommendations:

It is recommended that Bigsby Island be considered a candidate wilderness area. On-site evaluation of the features described above should be made. In conjunction with Splitrock, Painted Rock and Dawson Islands, Bigsby Island would contribute significantly to representing the transition between the clay plain to the south and the bedrock uplands to the north. The islands could serve as an alternate to the Aulneau Peninsula wilderness proposals; similar features are represented in less area.


KENORA
SHOAL LAKE
MINNESOTA
LAKE OF THE WOODS
UNITED STATES
CANADA
BIG ISLAND
Bigsby Island
Stony Pt.
Garden I.
Driftwood Pt.
Sugar Pt.
Rocky Pt.
Long Pt.
Big Traverse Bay
Roosevelt
Williams
Graceton
BAUDETTE
RAINY RIVER
Clementson
Border
MATHIEU
DEWART
TOVELL
McCROSSON
SPOONER
PRATT
SUTHERLAND
SIFTON
WILD RICE RESERVE
BLUE
BELLES
PATTULLO
TAIT
MORLEY
SHERSTON
KIRKUP
HAYCOCK
LE MAY
CODE
HARROSS
MACDUARRIE
McCREDDEN
SWEDER
PENINSULA
Northern Peninsula
Western Peninsula
Eastern Peninsula
Labyrinth Bay
Whitefish Bay
Falcon Bay
Sabaskong Bay
Dogtooth Bay
Golden Rock
Pine Portage
Long Lake
Lake of the Woods Provincial Park
Sioux Narrows Provincial Park
Kenora Airport
Dryden Airport
Baudette Airport
Rainy River Airport



Topographic map showing location and physiography of Bigsby Island.
(Scale: grid square equals 1 sq. km.)

Airphoto (A 13559-31) showing physiography of Bigsby Island. Scale 1 in.=1 mi.

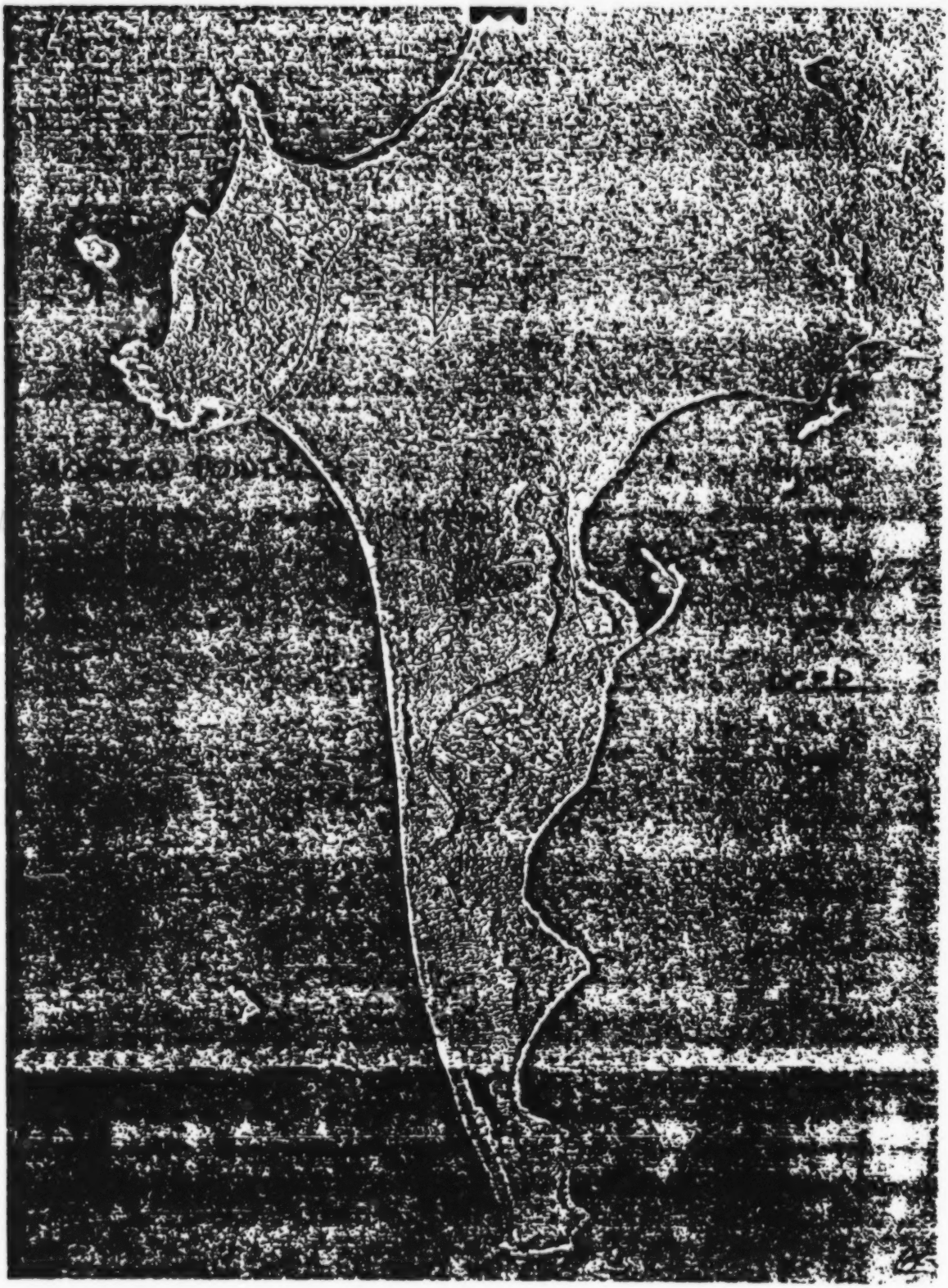


PHOTO: 65·4902
13·5

SCALE 1" = 1/4 mi.

EARTH SCIENCE INVENTORY CHECKLIST

NAME	MAP NAME	MAP NUMBER	UTM REFERENCE
Split Rock, Painted Rock, Dawson Is.	Morson Big Island	52E 1 52E 2	see map

COUNTY	LAT.	LONG.	ALT. MIN.	ALT. MAX.
	49°11'	94°30'	340m (1060')	390m (1200')

TOWNSHIP

LOT CONCESSION
in Lake of the Woods, in a north-south line south of the Aulneau Peninsula and north of Bigsby Is.

AREA Splitrock - 1100 ha (2720 ac.)
Painted Rock - 1650 ha (4080 ac.)
Dawson - 1250 ha (3090 ac.)

OWNERSHIP
Crown

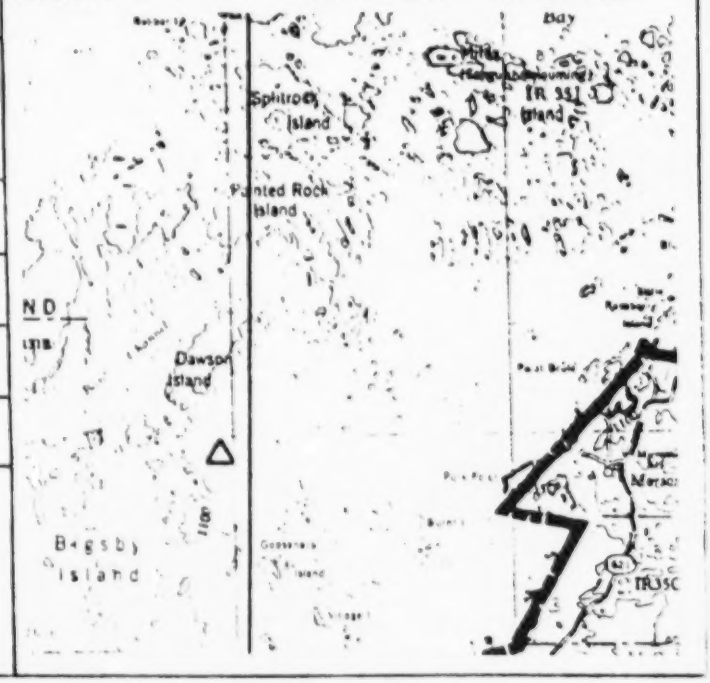
ADMINISTRATION

MNR REGION & DISTRICT	CONSERVATION AUTH.
NWR-Kenora	

AERIAL PHOTOGRAPHS — BASEMAPS

YEAR ROLL FLIGHT LINE NUMBERS
Federal series A13559, 64-66.

1:250,000 NTS MAP SHOWING AREA BOUNDARIES



EARTH SCIENCE FEATURES
- granitic terrain in the Wabigoon Subprovince, Superior Province, Canadian Precambrian Shield.
- southern edge of the Aulneau Batholith exposed on Split Rock Is.; contemporaneous granitic stock exposed on Painted Rock and Dawson Is.
- wave-washing by glacial Lake Agassiz extensive on Painted Rock and Dawson Is.; a thin mantle of till remains on Split Rock Island.
- minor pockets of lake clays in bedrock depressions.

SENSITIVITY
- low to most uses.

SIGNIFICANCE
- adequate representation of: Manitou-Kenora Drift Complex, granitic terrain of Wabigoon Subprovince, wave-washed bedrock of glacial Lake Agassiz.

MAJOR REFERENCES

Zoltai, 1961.

DATE COMPILED	COMPILER
29 Oct. 80	P. Kor

Ontario Ministry of Natural Resources, Division of Parks, Parks Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

Physical Features: brief flight over area 11 Sept. 80

Split Rock, Painted Rock and Dawson Islands occur in a north-south line between the Aulneau Peninsul. and Bigsby Island in the southern portion of Lake of the Woods. All three islands consist of undifferentiated granitic intrusive rocks of the Wabigoon Subprovince, Superior Province, Canadian Precambrian Shield. Split Rock Island lies within the southern portion of the Aulneau Batholith, a huge complex of granitic terrain which underlies most of the Aulneau Peninsula (Zieklke, 1975, p.6). An east-west lineation in the bedrock is evident on air photographs, an effect common to the edges of large plutonic intrusions. Painted Rock and Dawson Islands also exhibit a very evident lineation on the air photographs, in a distinct circular pattern roughly 8 km (5 mi.) in diameter. The islands represent the exposed portions of a small circular (50 sq. km or 5000 ha) stock probably intruded into the surrounding country rock at about the same time as the Aulneau Batholith. The centre of the stock lies between Painted Rock and Dawson Islands. Detailed studies on the rocks of the islands have as yet not been attempted.

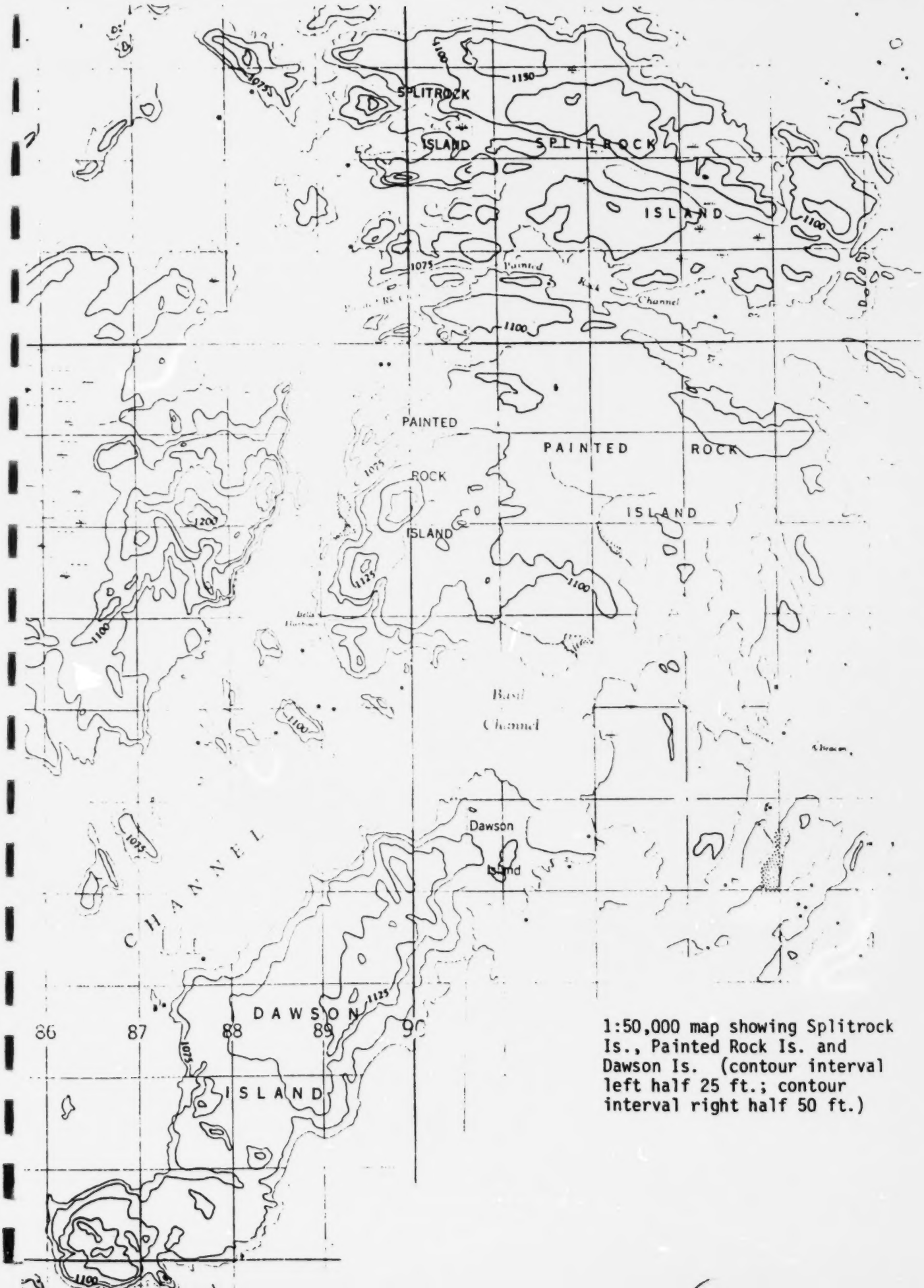
Zoltai (1965, Map S165) indicates that the degree of till cover changes appreciably from Split Rock Island, where the bedrock is essentially mantled by a thin veneer of stony sand till, to Painted Rock Island, where large areas of bare bedrock attest to the wave-washing action of glacial Lake Agassiz. These observations were substantiated by an air photo review and a brief aerial reconnaissance of the islands by the writer. Dawson Island is also wave-washed, with very little surficial aggregate apparent from the air photographs or the brief aerial survey. Lowlying wetlands occur commonly in the numerous bedrock depressions, particularly between the elongate bedrock ridges.

Significance:

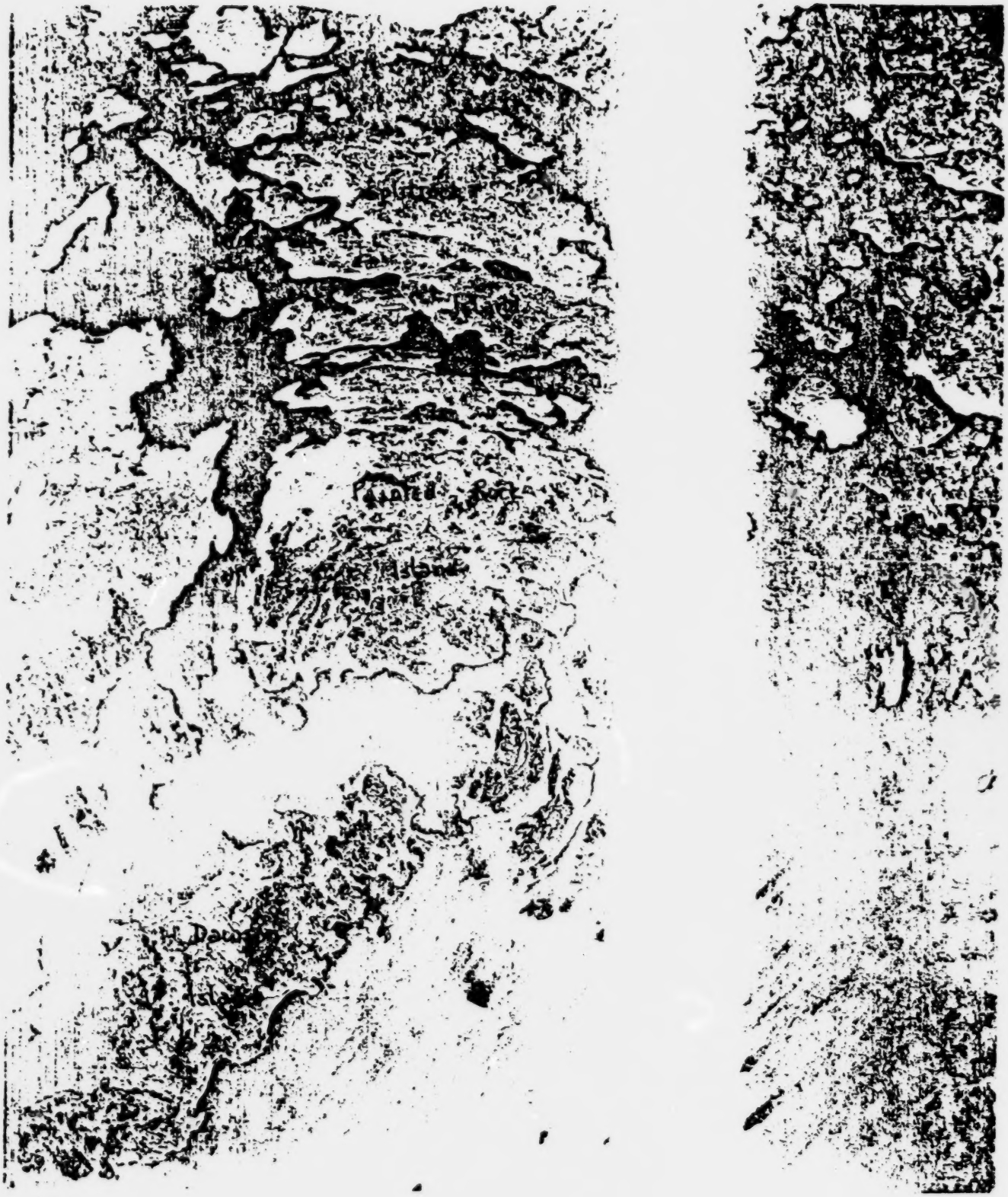
Split Rock, Painted Rock and Dawson Islands represent virtually the same type of terrain as the Aulneau Peninsula, but do so in a much smaller surface area. The plutonism which closed the Early Precambrian about 2500 m.y. ago is well-represented by a small portion of the Aulneau Batholith (on Split Rock Island), and a distinct, contemporaneous granitic stock (on Painted Rock and Dawson Islands). The Painted Rock stock probably contains a wealth of granitic textures and associations in a relatively small geographic area, as an almost unbroken section is exposed from the centre to the edge of the intrusion. Representation of wave-washed bedrock knolls (due to high water levels in glacial Lake Agassiz) and the "thin till over bedrock" component of the landscape is also excellent within the group of islands. Like the Aulneau Peninsula Candidate Wilderness Area, the islands described in this checksheet adequately represent a portion of Site District 1, Site Region 5S (as described by Hills; see Life Science Framework) and the Manitou-Kenora Drift Complex, a large, relatively homogenous terrain of rolling, bedrock-controlled uplands interspersed with numerous lakes and wetlands (see Landscape Unit Descriptions in final report, Earth Science Systems Plan, 1981).

Recommendations:

The features which occur on Split Rock, Painted Rock and Dawson Islands essentially duplicate those found on the Aulneau Peninsula. It is recommended that the islands be considered as a viable alternative to the Aulneau Peninsula in representing the earth science elements which they share. Incorporation into the parks system as a Wilderness or Nature Reserve class park is recommended.



1:50,000 map showing Splitrock Is., Painted Rock Is. and Dawson Is. (contour interval left half 25 ft.; contour interval right half 50 ft.)



Airphoto (scale 1 in.=1 mi.) showing Splitrock, Pai
Note very distinct circular bedrock pattern on Pain
the effect of a foliated plutonic intrusion.

d Dawson Islands.
l Dawson Islands,

POOR
QUALITY
ORIGINAL